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de Queiroz, Kevin. 1990. *Ctenosaura bakeri*.

Ctenosaura bakeri Stejneger
Utila Island Spiny-tailed Iguana

Ctenosaura bakeri Stejneger, 1901:467. Type locality, "Utilla Island, Honduras." Holotype, National Museum of Natural History (USNM) 26317, an adult male, prepared as an alcoholic specimen, collected 1897[?] by J. E. Jarnigan (examined by author).
Enyaliosaurus bakeri: Cochran, 1961:105. First use of combination. See Comment.

• **Content.** No subspecies are recognized.

• **Definition.** A medium-sized spiny-tailed iguana in which males are probably larger than females (few have been collected, but maximum known SVL's are 230 mm for males, USNM 26317, and 210 mm for females, USNM 25324). *C. bakeri* is characterized by: mode of 24 presacral vertebrae; mode of seven premaxillary teeth; cristae cranii form a smooth curve from the frontal onto the prefrontals; parietal roof deeply notched posteriorly throughout ontogeny so that the braincase is broadly exposed dorsally; a maximum of three or four cusps on crowns of posterior marginal teeth; usually four postmentals; a small dewlap; parietal eye conspicuous externally; dorsal crest scales strongly compressed and separated by one or more smaller scales, similar to adjacent scales in color and pattern, and reaching a maximum height of ca. 20 mm in adult males; dorsal crest narrowly interrupted in sacral region; a patch of enlarged, strongly keeled scales on the anterodorsal surface of the shank; subdigital scales at the base of pedal digit III not united at bases; tail strongly spinose proximally but not distally, longer than the body (unregenerated), and with more than 30 caudal vertebrae; anterior whorls of enlarged, spinous caudals separated by one-two rows of intercalary scales.

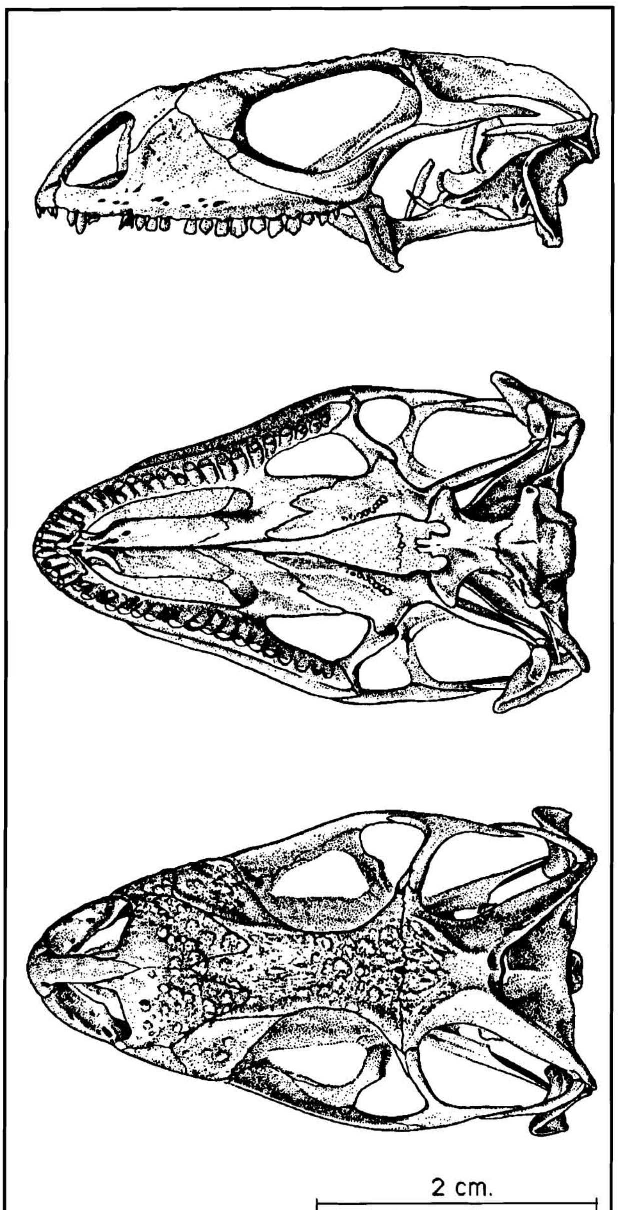
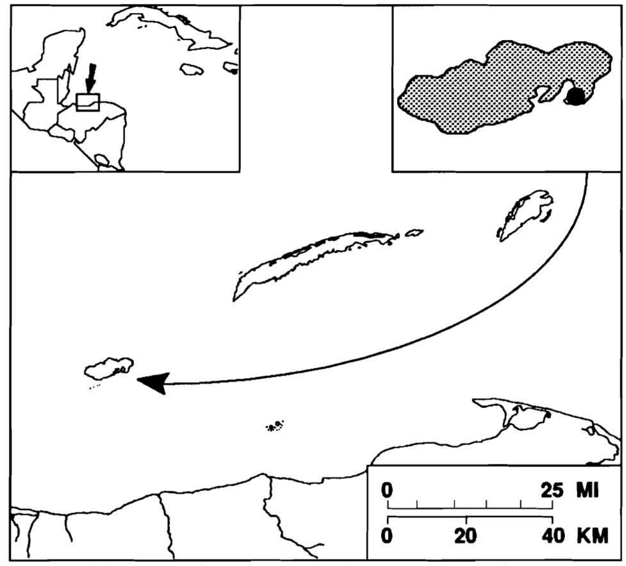


Figure. Line drawings of the skull of USNM 25324 by J. B. Clark from an unpublished manuscript by C. E. Ray and E. E. Williams.



Map. Solid circle indicates type-locality. Other localities are too imprecise to plot, but are restricted to Utila Island. See Distribution.

• **Diagnosis.** *Ctenosaura bakeri* is distinguished from *C. acanthura*, *C. hemilopha*, *C. pectinata*, and *C. similis* by enlarged, strongly keeled scales on the proximal anterodorsal surface of the shank and a smaller maximum size (<250 mm vs. >300 mm SVL). *C. bakeri* is distinguished from *C. clarki*, *C. defensor*, and *C. quinquecarinata* by a larger maximum size (>200 mm vs. <175 mm SVL), a mode of 24 rather than 25 presacral vertebrae, four rather than two post-mentals, and separation of more than one of the anterior whorls of enlarged, spinous caudal scales by two rows of intercalary scales rather than one. *C. bakeri* is distinguished from *C. palearis* by the last of these characters, a smaller dewlap, and in having the dorsal crest scales conform in color and pattern with the adjacent body scales rather than being uniform in color. *C. bakeri* is distinguished from *C. oedirhina* by taller (maximum 20 mm vs. 6 mm) and more strongly compressed dorsal crest scales (in adults), which are separated from one another by one or more smaller scales rather than forming a continuous row, and the presence of a dewlap (only expressed in adults). *C. bakeri* is further distinguished from *C. oedirhina* by having nasal and rostral scales separated by three rather than one or two scales, and by having fewer femoral pores ($\bar{X}$=16.8 vs. 22.5, total for both thighs) and fewer lorilabial scale rows below the suboculars ($\bar{X}$=2.1 vs. 3.0).

• **Descriptions.** Stejneger (1901) and Bailey (1928) described body proportions, scalation, pattern and color. De Queiroz (1987a, b) compared aspects of shape and scalation with *C. oedirhina*.

• **Illustrations.** Two black and white photographs are in Bailey (1928), one illustrates the dorsum of a preserved adult female (USNM

25324) and the second compares a lateral view of the head of the same specimen with *C. palearis.*

• **Distribution**. *C. bakeri* is known only from Isla de la Utila, westernmost of the Islas de la Bahía off the northern coast of Honduras. The only precise locality given is "near Utilla" (USNM 26317).

• **Fossil Record**. None.

• **Pertinent Literature**. Little is known about this species except external morphology and systematic relationships. Wilson and Hahn (1973; see also Meyer and Wilson, 1973) described habitat and abundance and gave locality records. De Queiroz (1987a,b) discussed phylogenetic relationships and zoogeography. Other references are in checklists of Smith and Taylor (1950), Peters and Donoso-Barros (1970), MacLean et al. (1977), Etheridge (1982), and Villa et al. (1988).

• **Nomenclatural History**. Spiny-tailed iguanas from Isla de Roatán (Ruatan Island) and Isla de Guanaja (Bonacca Island) have sometimes been referred to *C. bakeri* (e.g., Barbour, 1928; Peters and Donoso-Barros, 1970; Meyer and Wilson, 1973; Wilson and Hahn, 1973; MacLean et al., 1977; Etheridge, 1982). Those from Roatán were described as a new species, *C. oedirhina*, by de Queiroz (1987b), and those from Guanaja are *C. similis* (Günther, 1890; Wilson and Hahn, 1973; Meyer and Wilson, 1973).

Ctenosaura bakeri is part of a group of spiny-tailed iguanas that sometimes has been recognized as a separate genus, *Enyaliosaurus*. Smith and Taylor (1950) did not include *bakeri* in *Enyaliosaurus* Gray; Cochran (1961) appears to have been the first.

• **Remarks**. *Ctenosaura similis* is the only other spiny-tailed iguana found within the range of *C. bakeri* (Wilson and Hahn, 1973). Sexes of adult *C. bakeri* can be distinguished by the larger maximum sizes and taller crests of the males.

• **Etymology**. The name *bakeri* honors Frank Baker, former superintendent of the National Zoological Park in Washington, D. C., where the holotype and paratype lived just prior to their death and the subsequent description of the species (Stejneger, 1901).

• **Comment**. Resurrection of *Enyaliosaurus* (Smith and Taylor, 1950), which sometimes includes *C. bakeri* (Cochran, 1961; Meyer and Wilson, 1973), has not been formally justified and, therefore, the genus is not recognized here. Although monophyly of *Enyaliosaurus* (*sensu lato*) is supported by a derived character (enlarged and strongly keeled or spinous scales on the anterodorsal surface of the shank), this taxon is a subgroup of *Ctenosaura* rather than a separate taxon, which is to say that recognition of both *Enyaliosaurus* and *Ctenosaura* as genera renders the latter taxon paraphyletic. *Ctenosaura bakeri* appears to be most closely related to either *C. oedirhina* or *C. palearis* (de Queiroz, 1987a,b).

No adult *Ctenosaura bakeri* have been collected in the twentieth century. Although juveniles were collected in the late 1960's, the scarcity of adults, the restricted distribution, and the presence of human settlements on Utila suggest a threat to the persistence of the species.

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